Chipsmall Limited consists of a professional team with an average of over 10 year of expertise in the distribution of electronic components. Based in Hongkong, we have already established firm and mutual-benefit business relationships with customers from,Europe,America and south Asia,supplying obsolete and hard-to-find components to meet their specific needs.

With the principle of “Quality Parts,Customers Priority,Honest Operation,and Considerate Service”,our business mainly focus on the distribution of electronic components. Line cards we deal with include Microchip,ALPS,ROHM,Xilinx,Pulse,ON,Everlight and Freescale. Main products comprise IC,Modules,Potentiometer,IC Socket,Relay,Connector.Our parts cover such applications as commercial,industrial, and automotives areas.

We are looking forward to setting up business relationship with you and hope to provide you with the best service and solution. Let us make a better world for our industry!

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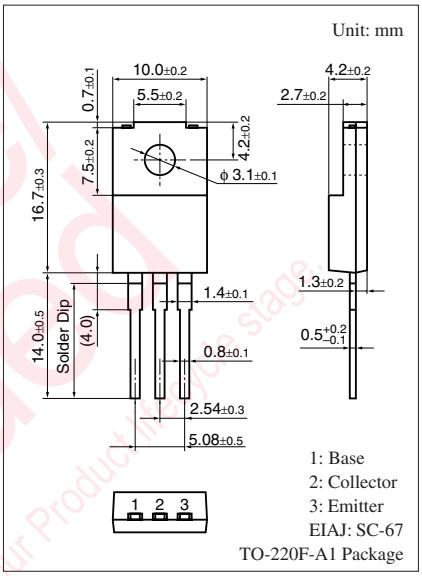
2SD1266, 2SD1266A

Silicon NPN triple diffusion planar type

For power amplification



■ Features

- High forward current transfer ratio h_{FE} which has satisfactory linearity
- Low collector-emitter saturation voltage $V_{CE(sat)}$
- Full-pack package which can be installed to the heat sink with one screw

■ Absolute Maximum Ratings $T_a = 25°C$

Parameter		Symbol	Rating	Unit
Collector-base voltage (Emitter open)	2SD1266	V_{CBO}	60	V
	2SD1266A		80	
Collector-emitter voltage (Base open)	2SD1266	V_{CEO}	60	V
	2SD1266A		80	
Emitter-base voltage (Collector open)		V_{EBO}	6	V
Collector current		I_C	3	A
Peak collector current		I_{CP}	5	A
Collector power dissipation	$T_C = 25°C$	P_C	35	W
			2.0	
Junction temperature		T_j	150	°C
Storage temperature		T_{stg}	−55 to +150	°C

■ Electrical Characteristics $T_a = 25°C \pm 3°C$

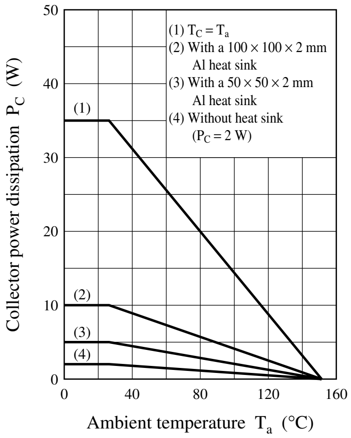
Parameter		Symbol	Conditions	Min	Typ	Max	Unit
Collector-emitter voltage (Base open)	2SD1266	V_{CEO}	I_C = 30 mA, I_B = 0	60			V
	2SD1266A			80			
Base-emitter voltage		V_{BE}	V_{CE} = 4 V, I_C = 3 A			1.8	V
Collector-emitter cutoff current (E-B short)	2SD1266	I_{CES}	V_{CE} = 60 V, V_{BE} = 0			200	μA
	2SD1266A		V_{CE} = 80 V, V_{BE} = 0			200	
Collector-emitter cutoff current (Base open)	2SD1266	I_{CEO}	V_{CE} = 30 V, I_B = 0			300	μA
	2SD1266A		V_{CE} = 60 V, I_B = 0			300	
Emitter-base cutoff current (Collector open)		I_{EBO}	V_{EB} = 6 V, I_C = 0			1	mA
Forward current transfer ratio		h_{FE1} *	V_{CE} = 4 V, I_C = 1 A	70		320	—
		h_{FE2}	V_{CE} = 4 V, I_C = 3 A	10			
Collector-emitter saturation voltage		$V_{CE(sat)}$	I_C = 3 A, I_B = 0.375 A			1.2	V
Transition frequency		f_T	V_{CE} = 10 V, I_C = 0.5 A, f = 10 MHz		30		MHz
Turn-on time		t_{on}	I_C = 1 A, I_{B1} = 0.1 A, I_{B2} = − 0.1 mA		0.5		μs
Storage time		t_{stg}	V_{CC} = 50 V		2.5		μs
Fall time		t_f			0.4		μs

Note) 1. Measuring methods are based on JAPANESE INDUSTRIAL STANDARD JIS C 7030 measuring methods for transistors.

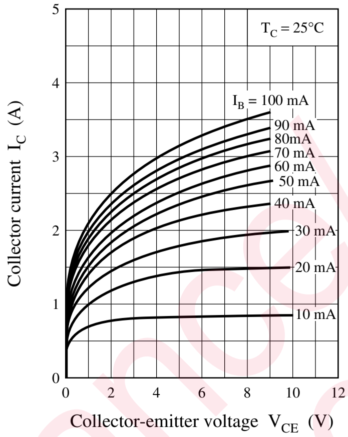
2. *: Rank classification

Rank	Q	P	O
h_{FE1}	70 to 150	120 to 250	160 to 320

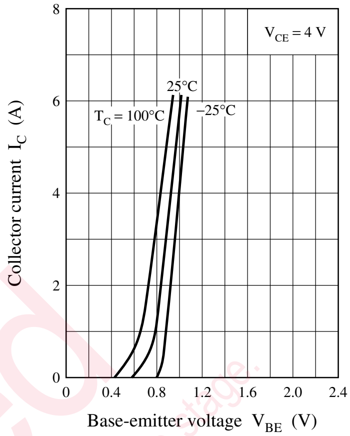
P_C — T_a



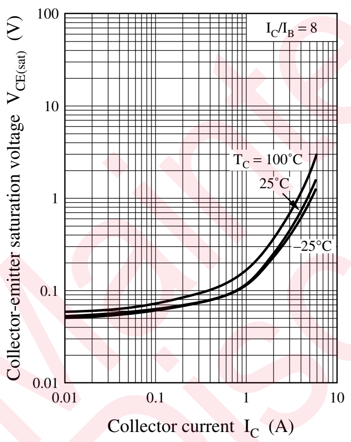
I_C — V_{CE}



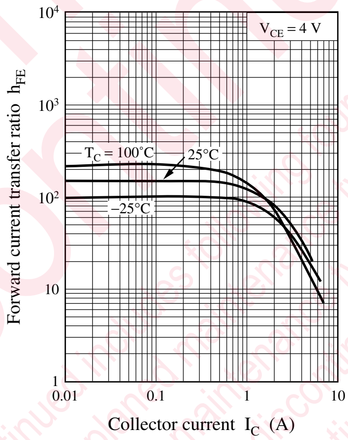
I_C — V_{BE}



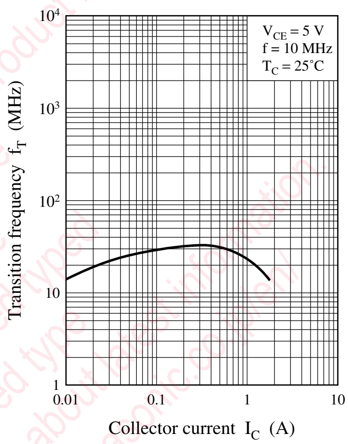
$V_{CE(sat)}$ — I_C



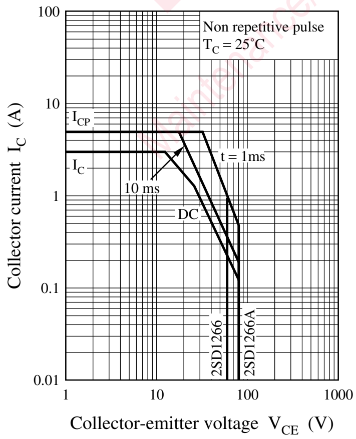
h_{FE} — I_C



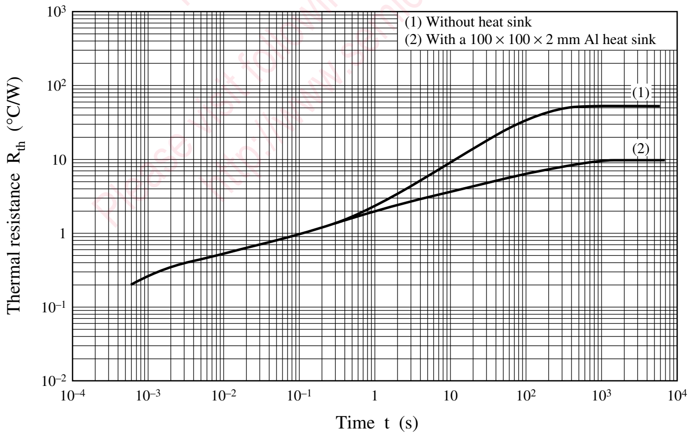
f_T — I_C



Safe operation area



R_{th} — t



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